ELSEVIER

ISA Transactions 40 (2001) 405–407

ISA TRANSACTIONS®

www.elsevier.com/locate/isatrans

Cumulative contents of Volume 40

Volume 40, Number 1, 2001

1 **Message from the Editor**
R.R. Rhinehart

3 **Modeling and fabrication of optical interference rugate filters**
D.A. Linkens, M.F. Abbod, J. Metcalfe, B. Nichols

17 **Predictive PI versus Smith control for dead-time compensation**
K.K. Tan, T.H. Lee, F.M. Leu

31 **Robust PID controller design for non-minimum phase time delay systems**
Y.J. Huang, Y.-J. Wang

41 **Experimental design of an optimal phase duration control strategy used in batch biological wastewater treatment**
N. Pavšelj, N. Hvala, J. Kocijan, M. Roš, M. Šubelj, G. Mušič, S. Strmčnik

57 **Adaptive robust motion control for precise trajectory tracking applications**
K.K. Tan, S.N. Huang, H.F. Dou, T.H. Lee, S.J. Chin, S.Y. Lim

73 **H_∞ control of free-radical polymerisation reactors**
S. Borg, S.K. Nguang, X.D. Chen

85 **Computer-based monitoring and fault diagnosis: a chemical process case study**
P. Ralston, G. DePuy, J.H. Graham

Volume 40, Number 2, 2001

99 **Winner take all experts network for sensor validation**
G.G. Yen, W. Feng

111 **A new modified Smith predictor: the concept, design and tuning**
D. Vrečko, D. Vrančić, D Juričić, S. Strmčnik

123 **Output-sliding control for a class of nonlinear systems**
Y.J. Huang, H.K. Way

133 **Analytical design and analysis of mismatched Smith predictor**
W. Zhang, X. Xu

139 **Output feedback neurolinearization**
R.B. Boozarjomehry, W.Y. Svrcek

Published by Elsevier Science Ltd.

155 Composite control of a gyro mirror line-of-sight stabilization platform — design and auto-tuning
K.K. Tan, T.H. Lee, A. Mamun, M.W. Lee, C.J. Khoh
173 Intent-based process control configuration models
E.H. Bristol
183 Verifying common-cause reduction rules for fault tolerant systems via simulation using a stress–strength failure model
J.V. Bukowski, W.M. Goble
191 Improved process control alarm operation
E.H. Bristol

Volume 40, Number 3, 2000

207 Optimal filtering and Bayesian detection for friction-based diagnostics in machines
L.R. Ray, J.R. Townsend, A. Ramasubramanian
223 Improving performance using cascade control and a Smith predictor
I. Kaya
235 Robust control for a class of time varying systems via switching hypersurface design with output signals
Y.J. Huang, H.K. Way
245 Comparative study of a learning fuzzy PID controller and a self-tuning controller
H.B. Kazemian
255 A new autotuning algorithm for PID controllers using dead-beat format
R. Bandyopadhyay, D. Patranabis
267 Application of the SCADA system in wastewater treatment plants
B. Dieu
283 Intelligent system for start-up of a petroleum offshore platform
M.C.M. Campos, E. Satuf, M. de Mesquita
295 A framework for modelling in S88 constructs for scheduling purposes
A.L. Nortcliffe, M. Thompson, K.J. Shaw, J. Love, P.J. Fleming

Volume 40, Number 4, 2000

307 Development of inferential measurements using neural networks
S. Bhartiya, J.R. Whiteley
325 Quantitative feedback synthesis of sampled-data systems with time-delay by approximate Z-transform
T.-C. Lin, C.-H. Wang, C.-C. Teng
333 Placing all closed loop poles of missile attitude control systems in the sliding mode via the root locus technique
Y.J. Huang, H.K. Way
341 Guide lines for the tuning and the evaluation of decentralized and decoupling controllers for processes with recirculation
D. Pomerleau, A. Pomerleau

353 **A comparison of traditional and adaptive control strategies for systems with time delay**
C.W. Alexander, R.E. Trahan Jr.
369 **Nonlinear mill control**
G. Martin, S. McGarel
381 **Optimisation of fed-batch culture of hybridoma cells using genetic algorithms**
S.K. Nguang, L. Chen, X.D. Chen
391 **Tolerable risk guidelines**
E.M. Marszal
401 **Author index of Volume 39**
405 **Cumulative contents of Volume 40**